

KOROTKOV, G. Ye.

"Problem of the Action of the Wind Upon Waves," Meteorol. i Gidrologiya, No 3, 1954, pp 48-49

Critical remarks on the article by Yu. M. Krylov, in Meteorologiya i Gidrologiya, No 5, 1952. (RZhGeol, No 6, 1955) SO: Sum.No. 713, 9 Nov 55

USSR/Geophysics - History

FD-1253

Card 1/1 : Pub. 129-15/25
Author : Konokova, G. Ye.
Title : From the history of geophysics in Moscow University.
Periodical : Vest. Mosk. un., Ser. fizikomat. 1 yest. nauk, 9, No 2, 121-132,
Feb 1954
Abstract : Studies the master's dissertation of N. I. Astrakov, (Discussion of
atmospheric electricity," 1836.
Institution : Chair of General Physics
Submitted : March 18, 1953

KONONKOVA, G. YE.

AUTHOR: Kononkova, G.Ye. and Kontoboytseva, N.V.

49-12-5/16

TITLE: Temperature Fluctuations in the Surface Layer of the Sea
Caused by Waves (Kolebaniya temperatury v poverkhnostnom
sloye morya, vyzvannye volneniyem)

PERIODICAL: Izvestiya Akademii Nauk SSSR, Seriya Geofizicheskaya,
1957, No.12, pp. 1478 - 1483 + 1 plate (USSR).

ABSTRACT: On the suggestion of A.G. Kolesnikov, the authors carried out in the surface layer of the Black Sea, in 1955, simultaneous measurements of the temperature fluctuations, the vertical temperature gradient, speed of flow and also of the height and periods of the waves and of the wind speed in ~~three levels~~. Devices for sensing the temperature and the wave formation were fitted in a row in the sea at depths of 1 m and each sensing device was connected to the corresponding loop of an oscillograph ~~706-12~~, which recorded simultaneously the fluctuations in the temperature and the waves and various other parameters in the points under observation. The oscillograph and other apparatus were fitted at the experimental platform of the Black Sea division of the Marine Hydro-Physics Institute Ac.Sc. USSR (Morskoy gidrofizicheskiy Institut AN SSSR).

Card1/3

49-12-5/16

Temperature Fluctuations in the Surface Layer of the Sea Caused by Waves.

As a temperature-sensing device, thermistors were used with inertia coefficients of 0.1 sec; a temperature variation by 0.004 °C produced a displacement of the oscillograph beam by 1 mm. The periods and heights of the waves were measured by means of a thermo-electric wavegraph, similar to that described by Isaacs and Wiegel [Ref.1.]. The results are given in the form of oscillograms and tables. The existence was established of temperature fluctuations with periods corresponding to periods of waves and phases which either correspond to wave phases or are displaced relative to these phases by 180°. The obtained results show directly that temperature fluctuations exist in the surface layer of the sea, caused by wave formation. However, the periods and the amplitudes of these fluctuations differ greatly. Whilst the periods of temperature fluctuations in the depths caused by internal waves can be measured in hours and even days and the amplitudes by degrees, the periods of the temperature fluctuations in the surface layer of the sea caused by surface waves amount to only a few seconds and the amplitudes to a few hundredths of a degree.

Card2/3 There are 3 figures, 2 tables and 4 Slavic references.

49-12-5/16
Temperature Fluctuations in the Surface Layer of the Sea Caused by
Waves.

ASSOCIATION: Moscow State University im. M.V. Lomonosov
(Moskovskiy Gosudarstvennyy Universitet im.
M.V. Lomonosova)

SUBMITTED: November 16, 1956.

AVAILABLE: Library of Congress

Card 3/3

1C(2), -10(4)

SOV/155-58-2-47/47

AUTHOR: Kononkova, G.Ye.

TITLE: On Wave Measurement at the Sea Surface With the Aid of the Indicators for Underwater Pressure (Ob izmerenii voln na poverkhnosti morya datchikami podvodnogo davleniya)

PERIODICAL: Nauchnyye doklady vysshey shkoly. Fiziko-matematicheskiye nauki, 1956, Nr 2, pp 228-234 (USSR)

ABSTRACT: This is a report on an experimental series carried out in the experimental basin of the Hydrophysical Institute of the Academy of Sciences of the USSR. It was stated: the classical theory of waves of an infinitely small amplitude in an ideal fluid of finite depth yields an incorrect relation between the wave amplitude on the free surface and the amplitude of the wave pressure in a certain depth. The difference of the theoretical and the experimental results increases with the period and height of the wave. It is conjectured that the discrepancy can be brought back to the fact that the theory does not consider the friction on the bottom of the sea. The recording of the oscillations of the water level was carried out according to the method of A.A.Ivanov and V.V.Shuleykin [Ref 1]. The wave pressure was measured with a device of S.G.Boguslavskiy.

Card 1/2

On Wave Measurement at the Sea Surface With the Aid of SOV/155-58-2-47/47
the indicators for Underwater Pressure

There are 4 figures, and 5 references, 2 of which are Soviet,
and 3 American.

Card 2/2

KONONKOVA, G.Ye.

Georgii Ivanovich Skanavi; obituary. Vest. Mosk un. Ser. 3:Fis.;
astron 15 no.1:89 '60. MIRA 13:10)
(Skanavi Georgii Ivanovich, 1910-1959)

KOLESNIKOV, A.G.: KONONKOVA, G.Ye.

Instrumental determination of energy transmitted by normal wind
pressure to the surface of sea waves. Izv. AN SSSR. Ser. geofiz.
no.10:1551-1559 0 '61. (MIRA 14:9)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova.
(Winds) (Waves)

KONONKOVA, G.Ye.

Development of the theory of the generation of wind waves at
the end of the 19th and in the first half of the 20th century...
Ist. i metod. est. nauk 2:209-227 '63. (MIRA 16:11)

BUDAK, B.M.; VINOGRADOVA, Ye.A.; GLASKO, V.B.; KONONKOVA, G.Ye.;
POBORCHAYA, L.V.

Problem of unsteady water movement in a reservoir solved
by an electronic computer. Meteor. i gidrol. no.12:14-21
D '63. (MIRA 17:3)

1. Moskovskiy gosudarstvennyy universitet, fizicheskiy
fakul'tet.

DOBROKLONSKIY, S.V.; KONONKOVA, G.Ye.

Academician Vasilii Vladimirovich Shuleikin; on his 70th birthday
and fifty years of scientific work, (1895-). Vest. Mosk. un. Ser.
3: Fiz., astron. 20 no.1:92-94 Ja-F '65. (MIRA 18:3)

DOBROKLONSKIY, S.V.; KONONKOVA, G.Ye.

Seventieth birthday of Academician Vasilii Vladimirovich
Shuleikin, 1895- . Izv. AN SSSR. Fiz. atm. i okeana 1 no.2:
236-238 F '65. (MIRA 18:5)

VINOGRADOVA, Ye.A., kand. fiz.-matem. nauk; KONONKOVA, G.Ye., kand. fiz.-
matem. nauk

Experimental study of the transformation of a reservoir release
wave on a model of a river type reservoir. Meteor. i gidrol.
no.10:46-49 O '65. (MIRA 18:9)

1. Moskovskiy gosudarstvennyy universitet.

KONONNIKOV, A.M.

Natural zones. Izv.Vses.geog.ob-va 87 no.6:529-534 M-D '55.

(MLRA 9:3)

(Physical geography) (Phytogeography)

KONONOK, A. I., Scientific co-worker
Scientific Research Veterinarno-Sanitary Laboratory
City Vet. Dept.
Moscow City Executive Committee
"A truck for transfer of animal carcasses."
SO: Vet. 26 (11) 1949, p. 50

KONONOV, A.

Lawbreakers. Okhr.truda i sots.strakh. 6 no.1:28-29 Ja '63.
(MIRA 16:1)
(Kyrgyzshev Province—Industrial hygiene)
(Youth—Employment)

KONONOV, A.G.

Isolated lesion of the pancreas. Vest. khir. 93 no.12:101-102
D '64. (MIRA 18:5)

1. Iz Boyuklovskoy uchastkovoy bol'nitsy (glavnyy vrach - A.G.
Kononov) Sakhalinskoy oblasti.

KONONOV, A.I., starshiy elektromekhanik; PARFENOV, S.N.

Concerning the shortcoming in the design of switch signaling commutators. Avtom., telem.i sviaz' 6 no.2:37-38 F '62.

(MIRA 15:3)

1. Buyskaya distantziya signalizatsii i svyazi Severnoy dorogi (for Kononov).
2. Vedushchiy konstruktor Konstruktorskogo byuro Glavnogo upravleniya signalizatsii i svyazi Ministerstva putey soobshcheniya (for Parfenov).

(Railroads--Signaling)

KONONOV, A.

USSR/Medicine - Horses, Diseases
Parasites, in Animals

Apr 49,

"Peculiarities in the Course of Equine
Piroplasmosis and Nuttalliosis During Intense
Helminthous Invasions," A. Kononov, 1 p

"Vet" No 4

Clinical and hematological data showed that the
course of hemosporidium diseases and the great
mortality of horses described herein were
caused by intense helminthous invasions by the
Strongylus, Parascaris Equorum and Anaplocephala.
Specialists must introduce proper measures to pro-
tect horses in localities subject to these dis-
eases.

66/49756

KONCOV, A. I.

33381. Avtomashina Dlya Perevozkhi Trupov Zhivotnykh. Veterinariya, 1949,
No. 11, c. 50-53.

SO. Letopis' Zhurnal'nykh Statey, Vol. 45. 45, Moskva, 1949

KONONOV, A.I.

(From material received by the editor on Diseases of Swine)
1. Extract: "Problem of Pasteurellosis in Swine" by Veterinarian

A.I. Kononov (Kostrenskaya Interrayon Veterinary Bacteriological Laboratory).
On the basis of extensive experience in serving consolidated collective farms, the author has come to the conclusion that pasteurellosis in swine, despite references in the literature to the predominantly sporadic character of its occurrence, occurs largely as a secondary infection and may often have an independent course. Among the factors that predispose to pasteurellosis are: unsatisfactory feed, insufficient vitamin and mineral supplements, cold, dampness, poor housing conditions, overcrowding, the activity of filtrable viruses, etc.

The author points out some regular phenomena of pasteurellosis: seasonal character (June-October), high rate of morbidity or mortality (up to 8 percent) especially among young stock from 3 to 6 months old.
Page 55; (Veterinariya, No. 9, 1952)
SO. Report U-5638; 10 March 1954; p. 45;

de g

KONONOV, A. I., (Veterinary Surgeon, Town of Koresten', Ukrainian SSR) and
Kugot, N. L., (Veterinary Surgeon, Emilchinsk Raion Zhitomir Oblast')

The control of the balantidiosis dysentery in swine.

Veterinariya vol. 38, no. 10, October 1961, pp. 81-89

KONONOV, A.I.

Role of wild animals in the spread of rabies. Zhur. mikrobiol.
epid. i immun. 31 no.2:102-103 D '60. (MIRA 14:6)
(RABIES) (ANIMALS AS CARRIERS OF DISEASE)

KONONOV, A.I.

Leptospirosis in cattle. Veterinariia 41 no.6:33-34 Je '64.

1. Zaveduyushchiy Korostenskoy mezhrayonnoy veterinarnoy laboratoriyey, Zhitomirskoy oblasti.
(MIRA 18:6)

KONONOV, A.I.

GRISHIN, G.L.; KARASNY, I.P.; KONONOV, A.I.

Gas potential of lower Cambrian sediments in the Parfenovskaya
area. Geol. nefti 2 no.4:22-25 Ap '58. (MIRA 11:5)

1. Vostsibneftegeologiya.
(Irkutsk Province--Gas, Natural--Geology)

3(5) PHASE I BOOK EXPLOITATION NOV/2219

RSPZH. Glavnoye upravleniye geologii i okruzhnyy neft' i gaz. Glavnyy naft'yanyy i gazovyy sibirskiy (Geology and Oil- and Gas-bearing Possibilities of Eastern Siberia) Moscow, Oostop-tekhnizat, 1959. 486 p. 1,650 copies printed.

Additional Sponsoring Agency: Vostochno-Sibirskiy naft'yegeologicheskii tsentr.

Ed.: V.O. Vasil'yev; Executive Ed.: Ye.G. Pershina; Tech. Ed.: I.G. Podtem.

PURPOSE: The book is intended for geologists interested in the stratigraphy, lithology, tectonics, and the oil- and gas-bearing possibilities of the Eastern Siberian platform and Zabaykalye.

COVERAGE: This collection of articles contains materials on the stratigraphic classification and lithologic characteristics of sediments of the Cambrian system and of the so-called "ancient" beds developed along the northern slope of the Eastern Sayan Mountains and the western littoral of Lake Baykal. Extensive information on the petrography and paleontology of these deposits is presented. A number of articles deal with the tectonics of the southern part of the Siberian platform and its oil- and gas-bearing possibilities of the Baykal-type depressions. There are 40 tables, 74 figures, and 4 charts. There are 205 Soviet references.

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From the Editor

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Georgiyev, A.I. Facies of the Lower Cambrian Sediments in the Southern Part of the Siberian Platform

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Il'yasova, Z.Sh. and L.A. Izosova. Spores in the Lower Cambrian Sediments of the Southern Part of the Siberian Platform

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Zaytshuk, P.S., Ye.M. Pavlov, and Ye.M. Makhcherakaya. Oil-accumulating Properties of the East Siberian Cambrian Sediments

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Maryshev, V.S. Cambrian Sediments of the Middle Course of the Biryusa River

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Mengozh, A.K. New Data on the Tectonics of the Southeastern Part of the Siberian Platform

356

Zemarskiy, S.M. and V.V. Sennikov. Geological Structure and the Oil- and Gas-bearing Possibilities of the Selenginskaya Depression

435

Vasil'yev, V.O., S.M. Gushkovich, and E.M. Likhovitskiy. The Problem of Interpreting Gravimetric and Magnetic Data for the Southern Part of the East Siberian Platform

475

Paleontologic Plates

489

AVAILABLE: Library of Congress

MM/ed
8-20-59

KONONOV, A.I.

Salt dome tectonics of the Zhigalo-Balykhtinskiyi and Ust' Kut
regions in the southeastern part of the Siberian Platform. Geol.
nafti 1 no.3:25-30 Mr '57. (MLRA 10:8)
(Siberian Platform--Geology, Structural)

KONONOV, A. I., Candidate of Geolog-Mineralog Sci (diss) -- "Paleostructural analysis of certain upheavals of the southern portion of the Irkutsk amphitheatre and the direction of further oil-prospecting work in this region". Irkutsk, 1958. 16 pp (Min Higher Educ USSR, Irkutsk State U im A. A. Zhdanov), 200 copies (KL, No 20, 1959, 110)

SENNIKOV, V.M.; VINKMAN, M.K.; KONONOV, A.N.

Cambrian-Ordovician and Ordovician in the Gornyy Altai. Trudy
SNIIGGIMS no.5:51-66 '59. (MIRA 13:6)
(Altai Mountains--Geology, Stratigraphic)

ACC NR: AP7000759

SOURCE CODE: UR/0679/66/036/005/0895/0900

ANDRIANOV, K. A., KONONOV, A. M., MAKAROVA, N. N., Institute of
Heteroorganic Compounds, Academy of Sciences SSSR (Institut elemento-
organicheskikh soyedineniy AN SSSR)

Reaction of Ammonolysis of Trialkyl(aryl)Chlorosilanes"

Moscow, Zhurnal Obshchey Khimii, Vol 36, No 5, 1966, pp 895-900

Abstract: The ammonolysis of methylethylphenylchlorosilane and
methyldiphenylchlorosilane and the coammonolysis of trimethyl-
chlorosilane with dimethylphenylchlorosilane and methyldiphenyl-
chlorosilane were studied. In the ammonolysis of methylethyl-
phenylchlorosilane, both in excess liquid ammonia and in a
stream of gaseous ammonia, only dimethyldiethyldiphenyldisila-
zane is formed. In the ammonolysis of methyldiphenylchloro-
silane, two products are formed: diphenylmethylaminosilane
and dimethyltetraphenyldisilazane. The coammonolysis of
trimethylchlorosilane with methyldiphenylchlorosilane in
equimolar amounts does not lead to the formation of 1,1,1,3-
tetramethyl-3,3-diphenyldisilazane, but proceeds separately,
forming hexamethyldisilazane and methyldiphenylaminosilane.

If the reaction is conducted in excess trimethylchlorosilane, which reacts readily
with ammonia, the coammonolysis product is formed. New organosilazanes and
organoaminosilanes were produced and characterized. Methyldiethylphenylsilane was
described. Orig. art. has: 3 tables. [JPRS: 37,177]

Card 1/2

UDC: 547.245.167/65

20
B

L 05204-51

ACC NR: AP7000759

TOPIC TAGS: silane, ammonolysis

• SUB CODE: 07 / SUBM DATE: 18Mar65 / ORIG REF: 004 / OTH REF: 009

Card 2/2 *gd*

KONONOV, Aleksandr Matveyevich; CHAPSKIY, O.U., redaktor; MOLODTSOVA, N.G.,
tekhnicheskiy redaktor

[Universal tractors] Propashnye traktory. Moskva, Gos. izd-vo selkhoz.
lit-ry, 1956. 285 p. (MLBA 9:12)
(Tractors)

ACC NR: ~~AP6006363~~ (A) SOURCE CODE: UR/0413/66/000/002/0095/0096

INVENTOR: Andrianov, K. A.; Kononov, A. M.; Makarova, N. N. 14

ORG: none

TITLE: Preparative method for polysilazanes. Class 39, No. 178108 B 15

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 2, 1966, 95-96

TOPIC TAGS: polysilazane, polymerization

ABSTRACT: An Author Certificate has been issued for a preparative method for linear or spiro polysilazanes. The method involves polymerization at above 300C of alkylphenyldisilazanes and alkyl-phenyl(phenylamino)silanes in the presence of alkali. [80]

SUB CODE: 11/ SUBM DATE: 13Mar65/ ATD PRESS: 4198

07/

Card 1/1

UDC: 678.84

KONONOV, Aleksandr Matveyevich; SMELYANSKIY, V.A., red.; MAKHOVA,
N.N., tekhn. red.; SOKOLOVA, N.N., tekhn. red.

[Manual on "Belarus" tractors] Spravochnik po traktoram
"Belarus'." Moskva, Sel'khozizdat, 1962. 255 p.

(Tractors)

(MIRA 16:2)

ACCESSION NR: AP4041153

8/0020/64/156/004/0858/0860

AUTHOR: Andrianov, K. A.; Kononov, A. M.

TITLE: The mechanism of the rearrangement of dimethylcyclosilazanes

SOURCE: AN SSSR. Doklady*, v. 156, no. 4, 1964, 858-860

TOPIC TAGS: dimethylcyclosilazane, rearrangement, mechanism, ring expansion, ring contraction, ring cleavage, Si X reactivity, Si NH sub 2 reactivity, trimethyltriethylidisilazane

ABSTRACT: The following mechanism is proposed for the rearrangement of dimethylcyclosilazanes leading to expansion or contraction of the ring after its cleavage by the action of HX (HCl or H₂SO₄):

Card 1/3

ACCESSION NR: AP4041153

Orig. art. has: 4 equations.

ASSOCIATION: Institut elementoorganicheskikh soedineniy Akademii nauk SSSR
(Institute of Organometallic Compounds Academy of Sciences SSSR)

SUBMITTED: 18Feb64

DATE ACQ: 00

ENCL: 00

SUB CODE: GC

NO REF SOV: 002

OTHER: 000

Card 3/3

KONONOV, A.N:

Recent fracture tectonics in the southeastern Gornyy Altai.
Izv. Alt. Geog. ob-va SSSR no.5:21 '65. (MIRA 18:12)

1. Kompleksnaya tematicheskaya ekspeditsiya Zapadno-Sibirskogo
geologicheskogo upravleniya.

KONONOV, A.N.

Ordovician sediments in the Erkulyu anticline and Yabogan
syncline of the Gornyy Altai. Geol. i. geofiz. no.6:123-
128 '64. (MIRA 18:11)

1. Zapadno-Sibirskoye geologicheskoye upravleniye, Novokuznetsk.

KONONOV, A.N.

Late Paleozoic of the Yaloman granitoid complex in the Altai.
Geol. i geofiz. no.4:78-91 '65. (MIRA 18:8)

1. Zapadno-Sibirskoye geologicheskoye upravleniye, g. Novokuznetsk.

KONONOV, A.N.

Devonian sediments of the Central Altai. Mat.po geol.Zap.Sib.
no.63:116-122 '62. (MIRA 16:10)

KONONOV, A.N.

Age of late Paleozoic granitoids in the central part of the
Gornyy Altai. Geol. i geofiz. no.8:117-119 '62 (MIRA 18:2)

1. Zapadno-Sibirskoye geologicheskoye upravleniye, Novo-
kuznetsk.

KONONOV, A.N.

Petrology and metallogeny of volcanic rocks in some regions of
the Gornyy Altai. Trudy SNIIGGIMS no.35:29-41 '64.

(MIRA 18:5)

KONONOV, Aleksandr Petrovich; KOKOSHKO, A.G., red.

[Accounting and reports of industrial enterprises; a
lecture delivered in the Correspondence Higher Party
School Attached to the Central Committee of the CPSU]
Bukhgalterskii uchet i otchetnost' promyshlennykh pred-
priatii; lektsiia, pročitannaia v ZVPSH pri Tsk KPSS.
Moskva, "Mysl'," 1964. 71 p. (MIRA 17:9)

KONONOV, A.P.; FILIPPOVA, V.A.

Some problems in the organization of business accounting in
workshops. Khim. prom. 41 no.5:376-380 My '65. (MIRA 18:6)

NIKULIN, Vadim Mikhaylovich; KONONOV, A.S., retsenzents; POPOV, L.P.,
red.; SKOROBOGACHEVA, A.P., red. izd-va; MAL'KOVA, N.T.,
tekhn. red.

[Economics and organization of the manufacture of refractories]
Ekonomika i organizatsiia proizvodstva ogneporov. Sverdlovsk,
Metallurgizdat, 1962. 200 p. (MIRA 15:7)
(Refractories industry)

KONONOV, A.S., mladshiy nauchnyy sotrudnik; SHAMONT'YEV, V.A., mladshiy
nauchnyy sotrudnik

Brief characterization of the meteorological conditions in the
area of Molodeshnaya Station, based on 1962 data. Inform. biul.
Sov. antark. eksp. no.38:24-28 '63. (MIRA 16:7)

1. Arkticheskiy i antarkticheskiy nauchno-issledovatel'skiy institut.
(Molodezhnaya Station region, Antarctica--Meteorology--Observations)

KOMONOV, A.V., sadovod-lyubitel' (Moskva)

Effect of gibberellin on flowering in the grape. Priroda 49
no.11:104-105 N '60. (MIRA 13:11)
(Gibberellins) (Grape)

KONONOV, A.V. (Moskva)

Gibborellin in viticulture. Priroda 50 no.11:104-106 N '61.
(Gibberellins) (Grapes) (MIRA 14:10)

SOBOL', S.I.; KONONOV, A.V.

Autoclave production technology of copper powders. TSvet. met.
38 no.1:22-27 Ja '65 (MIRA 18:2)

L 34971-65 EWP(e)/EWT(m)/EWP(t)/EWP(k)/EWP(b) Pf-4/Pad IJF(c) JD/HW

ACCESSION NR: AP5008553

S/0286/65/000/006/0062/0063

AUTHORS: Sobol', S. I.; Besolov, A. F.; Kononov, A. V.

TITLE: A method for recovering metals, for instance copper, nickel, and cobalt, from solutions of their salts by recovery gases in an autoclave. Class 40, No. 169254

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 6, 1965, 62-63

TOPIC TAGS: metal powder, chemical production, autoclave, gas pressure

ABSTRACT: This Author Certificate presents a method for recovering metals, for instance, copper, nickel, and cobalt, from solutions of their salts by recovery gases in an autoclave. To improve the quality of metallic powder and to increase the productivity of the autoclave, the solution is fed into the autoclave continuously and at a constant rate depending on the gas temperature and pressure. The terminal concentration of the recovered metal in the spent solution is held at 12 g/liter.

ASSOCIATION: none

Card 1/2

Kononov, B.

27-12-17/27

AUTHOR: Kononov, B., Deputy Chairman of the TsS DSO "Labor Reserves"

TITLE: To Train Excellent Sportsmen (Gotovit' otlichnykh sportsmenov)

PERIODICAL: Professional'no - Tekhnicheskoye Obrazovaniye, 1957, ^{it}# 12, p 21-22 (USSR)

ABSTRACT: The article deals with athletic activities in general and with those of the Labor Reserves in particular, stating that for the 10 months of 1957 the year's plan for training badge carriers, USSR masters of athletics and sportsmen of the first category has already been exceeded. It mentions the numbers of established records, giving the names of the sportsmen, including those who have been awarded orders and medals by the Soviet Government.

ASSOCIATION: TsS DSO "Labor Reserves" (TsS DSO "Trudovyye rezervy")

AVAILABLE: Library of Congress

Card 1/1

AUTHOR: Kononov, B., Deputy Chief SOV-27-58-9-21/25

TITLE: 15th Anniversary of the "Labor Reserves" Sport Society
(Sportivnomu obshchestvu "Trudovyye rezervy"-pyatnadsat' let)

PERIODICAL: Professional'no-tekhnicheskoye obrazovaniye, 1958¹⁵ Nr 9,
pp 28 - 29 (USSR)

ABSTRACT: In 1943, the voluntary "Labor Reserves" sport society was founded. Besides promoting various sport activities among students of technical schools, this society has taken the initiative in constructing gymnasiums, sport fields and swimming pools.

ASSOCIATION: Ts DSO "Trudovyye Rezervy" (Ts DSO "Labor Reserves")

1. Physical fitness--USSR

Card 1/1

UL'YANOV, A., doktor tekhn.nauk; KONONOV, B., kand.tekhn.nauk

Mechanizing labor-consuming operations in frame cow barns. Sel'.
stroi. 15 no.4:7-8 Ap '61. (MIRA 14:6)
(Saratov Province—Dairy barns)

KONONOV, B.

The First All-Russian Spartakiada. Prof.-tekh. obr. 17 no.7:25 J1
'60. (MIRA 13:8)

1. Zamestitel' predsedatelya Rossiyskogo respublikanskogo soveta
Vsesoyuznogo dobrovol'nogo sportivnogo obshchestva "Trudoye
rezervy".

(Physical education and training)

KONONOV, B.

Welcoming the all-Russian Spartakiada. Prof.-tekh.obr. 18 no.6:
29 Je '61. (MIRA 14:7)

L. Zamestitel' predsedatelya Rossiyskogo respublikanskogo soveta
VDSO "Trudovyye rezervy".
(Sports)

UL'YANOV, A., prof., doktor tekhn.nauk; KONONOV, B., kand.tekhn.nauk

Over-all mechanization of frame cattle barns. Sel'. stroi. 15
no.7:6-7 J1 '61. (MIRA 14:8)
(Saratov Province--Dairy barns)

KONONOV, B.

Mass participation as a basis for sport work. Prof.-tekh. obr.
20 no.5:24 My '63. (MIRA 16:7)

1. Zamestitel' predsedatelya Rossiyskogo respublikanskogo soveta
Vsesoyuznogo dobrovol'nogo sportivnogo obshchestva "Trudovyye
rezervy."

(Physical education and training)

KONONOV, B.

Once more on transportation and dispatching work. Avt. transp.
41 no.3:24-26 Mr '63. (MIRA 16:4)

(Transportation, Automotive--Management)

X

KONONOV, B. I. Cand Tech Sci -- (diss) ^{"Discharge"} ~~"The leading out~~ of electrons from a
betatron¹ at 15 Mev by the electrostatic method." Tomsk, 1957. 9 pp.
(Min of Higher Education USSR. Tomsk Order of Labor Red Banner Polytechnic
Inst im S. M. Kirov), 100 copies (KL, 42-57, 93)

-28-

21.2100

68868

S/139/59/000/05/006/026
E032/E114

AUTHORS: Akimov, Yu.M., Kononov, B.A., and Sokolov, L.S.

TITLE: On the Extraction of the Electron Beam from a
Betatron Chamber 19

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy,
Fizika, 1959, Nr 5, pp 31-34 (USSR)

ABSTRACT: The Tomsk Polytechnical Institute has been studying methods for the extraction of the electron beam from the betatron chamber. Three of these methods, which have been found to be the most satisfactory, are described in the present paper.
1) The electrostatic method is based on the extraction with the aid of a special capacitor. The construction of the capacitor, the vacuum chamber etc. have been described in the literature (Refs 1 and 2). In this method it is possible to obtain the following beam parameters (15 MeV betatron): beam current 4×10^{-9} amp, cross-section of the beam at a distance of 2 cm from the exit window 6×10 mm, divergence in air 5° in the vertical plane and 8° in the horizontal plane. The electron beam extracted into the atmosphere contains up to 60% of electrons which have reached the end of the

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68868

S/139/59/000/05/006/026

~~E032/E114~~

On the Extraction of the Electron Beam from a Betatron Chamber

accelerating cycle.

2) The second method is based on the extraction without the use of any devices located inside the vacuum chamber. It employs asymmetric displacement of the equilibrium orbit beyond the limits of the working zone. This can be done by using the parametric resonance for the free radial oscillations of the electrons. In this method the mean beam diameter at a distance of 50 cm from the window is 40 cm. The extraction efficiency was found to be 75%.

3) The third method is based on the use of a toroidal pulsed extractor. The toroid (Fig 4) which is wound on a non-magnetic material and has a free channel through which the beam can pass, is placed in the magnetic field of the betatron. In the toroid channel the field can be adjusted to be zero. When the electrons enter the toroid channel they move in a straight line and along a tangent to the orbit. The toroid has been used for electrons of up to 15 MeV and uses 16 amps per 1 MeV. This compares favourably with the extractor described in Ref 3 which uses 65 amps per 1 MeV. The toroidal

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68868

S/139/59/000/05/006/026
E032/E114

On the Extraction of the Electron Beam from a Betatron Chamber
extractor gives a well-focussed beam and a good
extraction efficiency. Its properties are still
being investigated.
There are 5 figures and 3 references, of which 2 are
Soviet and 1 is English.

ASSOCIATION: Tomskiy politekhnicheskiy institut imeni S.M.
Kirova
(Tomsk Polytechnical Institute imeni S.M. Kirov)

SUBMITTED: December 27, 1959 (1958?) ✓

Card 3/3

S/159/62/000/006/022/032
E032/E314

AUTHORS: Kononov, B.A. and Rudenko, V.N.

TITLE: A multiscreen calorimeter for measurements on betatron radiation

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Fizika,
147 - 151

TEXT: A description is given of a two-screen calorimeter (Fig. 1). It consists of a lead absorber 1 suspended on nylon threads 2 inside an isothermal screen 3. This screen is, in turn, suspended inside a second isothermal screen 4. The screens are made of 2 mm thick metal foil. The second screen is attached to the lid 6 by perspex rods 5; the lid itself is also made of perspex (40 mm thick); the entrance window 7 is made of 0.1 mm thick aluminium foil. The temperature of the absorber is measured by a thermistor. The space inside the calorimeter is evacuated down to $10^{-1} - 10^{-2}$ mm Hg. Continuous stirring and thermostating was found to be unnecessary and the calorimeter was found to be capable of measuring intensities of 3×10^{-5} -

Card 1/2

S/275/63/000/002/006/032
D405/D301

AUTHORS: Vasil'yev, Ye.A. and Kononov, B.A.
TITLE: Electron component of betatron radiation
PERIODICAL: Referativnyy zhurnal, Elektronika i ee primeneniye,
no. 2, 1963, 46, abstract 2A271 (Elektron. uskorit-
eli, Tomsk, Tomskiy un-t, 1961, 167-170 (Collection))

TEXT: A study of the spectral composition of betatron radiation showed that the second maximum of the lateral (space) distribution of betatron radiation is due to the electron component, which has a continuous energy spectrum. The electron-component fraction of betatron radiation is estimated. The electron trajectories are determined, a knowledge of which prevents errors. The experimental procedure is described; the experimental results are given, as well as their interpretation.

[Abstracter's note: Complete translation]

Card 1/1

..., V. M.; KONONOV, B. A.; YEVSTIGNEYEV, V. V.

Magnetic Beta Spectrometer with Double Focussing for Carrying out Physics Investigations with the Electron Beam of a Betatron."

report submitted for All-Union Conf on Nuclear Spectroscopy, Tbilisi, 14-22 Feb 64.

Tomskiy politekhnicheskii institut (Tomsk Polytechnical Inst)

ACCESSION NR: AP4024068

S/0048/64/028/002/0400/0403

AUTHOR: Kononov, B.A.; Antonov, V.M.; Yevstigneyev, V.V.

TITLE: Investigation of the energy spectrum of the electron beam from a 7.5 MeV betatron (constructed at the Tomsk Polytechnic Institute) (Report, Thirteenth Annual Conference on Nuclear Spectroscopy held in Kiev 25 Jan to 2 Feb 1963)

SOURCE: AN SSSR. Izvestiya. Seriya fizicheskaya, v.28, no.2, 1964, 400-403

TOPIC TAGS: betatron electron spectrum, betatron output, Tomsk Polytechnic Institute betatron

ABSTRACT: The spectrum of the electrons emitted by the 7.5 MeV betatron constructed at the Tomsk Polytechnic Institute was investigated. A brief description of the betatron which has an E-shaped magnet is given. The experimental arrangement is diagramed in Fig.1 of the Enclosure. The electron distribution was analyzed by means of a sector type β -spectrometer, developed at the Institute; the electrons were detected by means of two AS-2 type gas discharge counters, connected into a coincidence circuit. The electron spectra obtained at different output energies are shown in Figs.2 and 3 of the Enclosure. Other figures in the text give the variation of

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ACCESSION NR: AP4024068

the half-width of the spectrum as a function of the electron energy, the voltage on the deflector, and the thickness of an aluminum absorber in the beam. The test results are described briefly. The tests show that under the optimum operating conditions the half-width of the electron energy spectrum does not exceed 1%. With deviation from the optimum conditions the half-width of the energy distribution in the extracted beam may increase to 5%. It is noted that these characteristics are adequate for medical purposes and radiation chemistry, but that for physical experiment requiring a high degree of accuracy a betatron of this type must be equipped with an appropriate stabilizing system. Orig.art.has: 6 figures.

ASSOCIATION: Tomskiy politekhnicheskii institut (Tomsk Polytechnic Institute)

SUBMITTED: 00

DATE ACQ: 08Apr64

ENCL: 02

SUB CODE: NS, SD

NR REF SOV:000

OTHER: 000

Card 2/4

ACCESSION NR: AP4024068

ENCLOSURE: 01

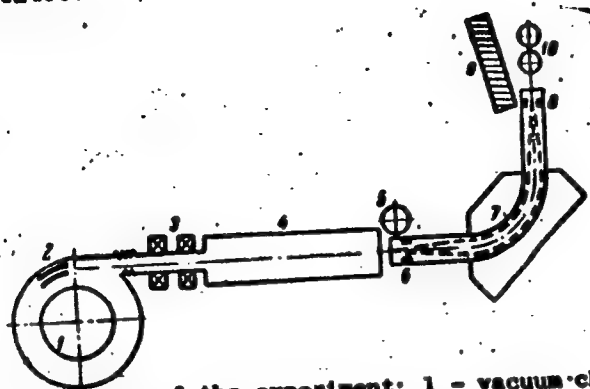


Fig.1. Diagram of the experiment: 1 - vacuum chamber of the betatron, 2 - deflector, 3 - quadrupole lenses, 4 - electron duct, 5 - ionization chamber, 6 - entrance aperture of the spectrometer, 7 - spectrometer vacuum chamber, 8 - exit aperture of the spectrometer, 9 - lead shielding, 10 - gas counters.

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ENCLOSURE: 03

ACCESSION NR: AP4024068

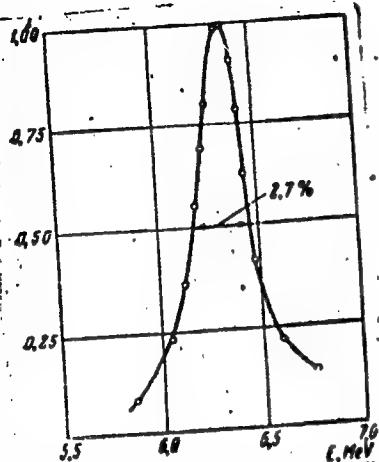


Fig.2. Energy spectrum of the electron beam from the betatron at an energy of 6.4 MeV.

Card 1/4

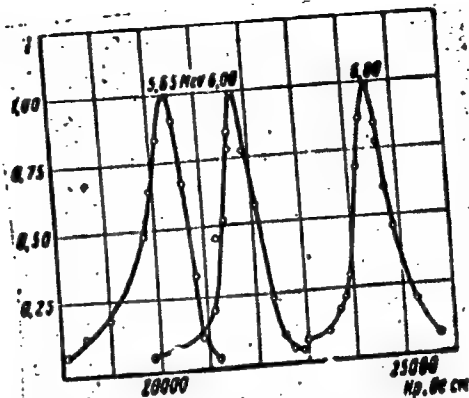


Fig.3. Spectra at different electron energies.

...used for an analysis of β and γ spectra of radioactive isotopes. The construction of the spectrometer permits exact tuning possible and makes possible a variety of physical investigation. L. S. [Translation of Abstract]

SUB CODE: 20

Card 1/1 nat

L 10402-67 ENT(1) IJP(c) AT SOURCE CODE: UR/2504/66/032/000/0060/0079
ACC NR: AT6033036

AUTHOR: Veksler, V. I.; Gekker, I. R.; Gol'ts, E. Ya.; Kotonov, B. I.; Luk'yanchikov, G. S.; Rabinovich, M. S.; Sarkisyan, K. A.; Serkezhev, K. F.; Silin, V. A.; Tsong, L. E.

ORG: none

TITLE: Radiation acceleration of a plasma

SOURCE: AN SSSR. Fizicheskiy institut. Trudy, v. 32, 1966. Fizika plazmy (Plasma physics), 60-79

TOPIC TAGS: plasma acceleration, HF oscillator

ABSTRACT: The article is of the review type (41 literature references) and surveys work done in the field in the Soviet Union, Japan, the United States and France. After a general mathematical introduction to the subject, the authors describe the first experiments on the radiation acceleration of plasmas using superhigh frequency generators. Detailed diagrams are given of two such systems. Detailed consideration is given to the investigation of the special characteristics of the interaction of superhigh frequency oscillations in a plasma, including the effect of plasma resonance, and the acceleration of a plasma by the action of the gradient of a superhigh frequency field. The two final sections deal respectively with the acceleration of a plasma in

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L 10402-67
ACC NR: AT6033036 APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000824310020-1

a longitudinal magnetic field, and the injection of pure hydrogen plasma clusters of small size. Orig. art. has: 15 formulas and 17 figures.

SUB CODE: 20/ SUBM DATE: none/ ORIG REF: 026/ OTH REF: 015

Card 2/2

KONONOV , B. N., Cand Tech Sci -- (diss) "Symmetric Triggers
on Semiconductor Triodes." Mos, 1957. 7 pp (Min of Higher
Education USSR, Mos Engineering-Physics Inst), 100 copies
(KL, 47-57, 88)

30

PA - 2726

AUTHOR
TITLE

KONONOV B.N., STEPANENKO I.P.

Computation Schemes on Basis of Semiconductor Triodes.
(Pereschetnyye skhemy na poluprovodnikovyykh triodakh -Russian)

PERIODICAL

Atomnaya Energiya, 1957, Vol 2, Nr 4, pp 364-375 (U.S.S.R.)
Received 5/1957

Reviewed 6/1957

ABSTRACT

The paper under review deals with the schemes of the nodes of those computation devices which are typical representatives of the nonlinear pulse generator with semiconductor triodes. The currently most frequently used semiconductor apparatus (germanium diodes, punctiform germanium triodes of the n-type, and smelted (?) areal germanium triodes of the type p-n-p) are treated with particular attention. The possibilities of the apparatus of other types are only briefly indicated. The semiconductor triode as switch: In the computation scheme under consideration the active element operates as switch, i.e. it can be in either of two possible states (either open or closed). In the commutator circuit of the closed semiconductor triode there always flows an initial "uncontrollable" current I_{ko} . This current intensity is a parameter of the transistor. The areal triodes are characterized by a strong "creeping" of the current I_{ko} . The "maximally opened" state of the semiconductor triode corresponds to the saturation with regard to the current in the commutator circuit. It is the main disadvantage of the punctiform triodes in the wiring schemes that they do not "contract to one point" at the saturation.

Card 1/2

For the computation schemes with areal triodes the paper under review

Computation Schemes on Basis of Semiconductor Triodes. PA - 2726

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000824310020-1

gives the most significant relationships. The following variations are discussed: computation of the wiring. The following variations are discussed: computation cell with independent displacement, wiring with automatic displacement, wiring without displacement. Then follows a discussion of the auxiliary nodes of the computation schemes, of the forming cascade, and of the high-voltage sources. Some conclusions. It is possible to build the computation schemes entirely on basis of semiconductor apparatus. Such schemes are extremely inexpensive, they can be very well operated by batteries, and therefore the development of portable devices is promising. At the time being, the semiconductor computation schemes can reach and even surpass the quality of the computation schemes with electron tubes. (With 16 reproductions).

ASSOCIATION
PRESENTED BY
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Card 2/2

19.9.1956
Library of Congress

KONONOV, B. N.

109-10-4/19

* AUTHOR: Kononov, B. N.

TITLE: Application of the Non-linear Feedback for the Elimination of the Saturation in the Transistors operating in Pulse Circuits (Primeneniye nelineynoy obratnoy svyazi dlya ustraneniya nasyshcheniya poluprovodnikovyykh triodov v impul'snykh skhemakh)

PERIODICAL: Radiotekhnika i Elektronika, 1957, Vol. II, No. 10, pp. 1253 - 1260 (USSR).

ABSTRACT: The operation of transistors in pulse circuits (such as multivibrators and coincidence circuits) has a number of disadvantages which result from the fact that the transistors are usually driven into the saturation region. This leads to the appearance of certain pulse delays which cannot usually be eliminated, especially in view of the fact that the transistors are temperature-sensitive and that the spread in their characteristics may be large; thus, if it is attempted to operate one transistor in the active region, it is difficult to ensure that the next unit will not be driven into the saturation region. One of the methods of eliminating the operation in the saturation region is to clamp the collector of the transistor

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APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000824310020-1

Application of the Non-linear Feedback for the Elimination of the Saturation in the Transistors operating in Pulse Circuits.

by means of a biased diode (see Fig.1). It is shown, however, both experimentally (see Fig.2) and theoretically that the use of the diode does not eliminate the delay between the end of an input pulse and the disappearance of the output pulse at the collector. The following method of the elimination of the operation in the saturation region is therefore proposed: for a grounded emitter transistor (see Fig.3) a non-linear feedback path is provided between the collector and the base by means of a diode in series with a resistance r and a battery E . At collector-base voltages greater than E , the diode is non-conducting, the feedback is absent and the input current is equal to the base current. When the collector-base voltage is equal to E , the diode becomes conducting and the amplification of the system rapidly decreases. It is shown that the above method of avoiding the saturation is very successful and design formulae for evaluating the values of r and E are given (see Eq.(7)). The feedback circuit as given in Fig.3 cannot easily be employed in practice and it is therefore necessary to modify it. Two such modifications are shown in Fig.4. The above circuits were tested experimentally and it was found that

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109-10-4/19

Application of the Non-linear Feedback for the Elimination of the Saturation in the Transistors Operating in Pulse Circuits.

they did eliminate the trailing edge delay (see Curve 5 in Fig. 6); they were also employed in a coincidence circuit and in a bi-stable multivibrator (see Fig.9). There are 9 figures, 7 references, 2 of which are Slavic.

SUBMITTED: March 22, 1957.

AVAILABLE: Library of Congress.

Card 3/3

KONONOV, B. N.

B. N. KONONOV: "Transients in symmetric triggers using semiconducting triodes." Scientific Session Devoted to "Radio Day", May 1958, Trudrezervizdat, Moscow, 9 Sep. 58

It is shown how optimum trigger parameters for which a circuit would have the maximum switching frequency can be obtained on the basis of an analysis of transients.

It is shown that the termination of the regenerative stage of the process is always specified, for the case of starting a trigger on separate inputs, by the limitation in that triode to whose input the starting pulse has been fed. The influence of positive feedback on the rate of overturning the trigger will be smaller, the larger the input signal amplitude.

An approximate analysis of transients for a counter start of the trigger would permit the "memory time" of the preceding state, the maximum length of the starting pulse for which the trigger is overturned into a state opposite to the initial, to be determined.

On the basis of an analysis of the transients, optimum values of the accelerating capacity have been determined. The maximum repetition frequency of the input pulses for a counter start of the trigger at a comparatively low-frequency semiconducting triodes is approximately two-thirds the limiting frequency of the triode current gain in a circuit with a common base.

KONONOV, B. N.

L. A. Serkin, I. P. Stepaneko, B. N. KONONOV, T. M. Agakhanyan, A. G. Filippov, L. N. Patrikeyev: "Elements of semiconducting digital machines." Scientific Session Devoted to "Radio Day", May 1958, Trudrezervizdat, Moscow, 9 Sep. 58

Results are presented of the development of systems of fundamental logical elements using semiconducting instruments for a digital computer. Fundamental computational relations and experimental characteristics of the elements are presented. Among the system elements are: a trigger, a coincidence circuit and an amplifier-limiter. The elements guarantee reliable operation of the fundamental components of a computer at a 500 kc frequency of the main (cyclic) pulses in an -60°C --- 50° temperature range with the relative humidity 98%.

KONONOV, B. N.

A. G. Filippov, I. P. Stepanenko, B. N. Kononov, T. M. Agakhanlan, L. A. Serkin, L. N. Patrikeyev, "Certain components of a digital computer using semiconducting triodes." Scientific Session Devoted to "Radio Day", May 1958, Trudrezervizdat, Moscow, 9 Sep 58.

The balanced operation of semiconducting elements of a computer (analyzed in the note "Elements of semiconducting computers") is verified in three basic components of a parallel type machine: the register; counter and adder. Logical circuits of the components mentioned are analyzed and a method and results of testing are presented. An experimental investigation has been made on four types of each of the components.

Experiments were carried out by changing the ambient temperature, the voltage of the supply source, by scattering the parameters of the components and replacement of the semiconducting instruments, by humidity. The experiments showed reliable operation of the set of computer elements developed.

Kononov, B. N.

AUTHORS: Kononov, B. N., Lebedev, V. A., Serkin, L. A., 119-1-4/13
Stepanenko, I. P., Filippov, A. G.

TITLE: Experiences With a Newly-Developed Register Operating With
Laminar Semiconductor Triodes (Opyt razrabotki registra na
ploskostnykh poluprovodnikovyykh triodakh)

PERIODICAL: Priborostroyeniye, 1958, Nr 1, pp. 10-13 (USSR)

ABSTRACT: The possibilities are shown of how to use semiconductor
triodes in numerical calculating machines. By means of a
block of "movable registers", the scheme of which is given,
the possibility of its application is proved. The register
mentioned can take up a numerical code and pass it on to the
left or right but it can also store a numerical code no
longer needed.

The main block is a decoder which brings about a
comparison of the states of neighbouring triggers. A switch-
-diagram is given for the triggers. The radio-technical
units used are discussed. It is most useful to employ
triodes with common emitters for the amplifiers used. With
such connections and with the aid of a transformer tuning
as well as of an R-C-member as corrector in the emitter

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Experiences With a Newly-Developed Register Operating
With Laminar Semiconductor Triodes

119-1-4/13

circuit a maximum amplification even of short impulses can be reached. With a certain arrangement to a 10 - 14 fold power amplification can be reached with a duration of the input pulse of 0,5 μ s. There are 6 figures and 3 references, all of which are Slavic.

AVAILABLE:

Library of Congress

1. Triodes-Application

Card 2/2

SOV/142-58-4-16/30

AUTHOR: Agakhanyan, T.M., Kononov, B.N., Stepanenko, I.P.

TITLE: On the Terminology of Transistor Electronics (O terminologii v oblasti tranzistornoy elektroniki)

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy - Radiotekhnika, 1958, Nr 4, pp 496-500 (USSR)

ABSTRACT: The paper summarizes the most important questions pertaining to Soviet terminology in the field of transistor electronics. The section "General Questions" deals with definitions for the concepts Semi-Conductor; Transistor; "Transistron"; and "Stereotron". Finally hole and electron transistors are defined. The second section deals with questions of junctions (plane and point change-over) as well as drawn and diffused junctions. Then the author deals with diodes and their functions and with triodes. A special section deals with the parameters of the triodes. Finally the paper deals with circuit diagrams. The editorial staff request the readers to contribute further to the field

Card 1/2

On the Terminology of Transistor Electronics

SOV/142-58-4-16/30

of defining scientific terminology.

ASSOCIATION: Kafedra elektroniki Moskovskogo inzhenerno-fizicheskogo instituta (Chair of Electronics, Moscow Institute of Engineering Physics)

SUBMITTED: April 21, 1958

Card 2/2

SOV/142-58-5-17/23

9(3), 28(1)

AUTHOR: Kononov, B.N., Candidate of Technical Sciences

TITLE: Research in the "Vuz". Short Information. Moscow Institute for Engineering and Physics

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy'- radiotekhnika, 1958, Nr 5, pp 622-623 (USSR)

ABSTRACT: The article gives a short summary of research which has been done in the institute; 1) Working out standard semi-conductor elements for a computing machine; done by A.G. Filippov, T.M. Agakhnyan, B.N. Kononov, L.A. Serkin, Yu.A. Volkov, V.I. Lebedev, L.N. Patrikeyev, A.V. Nikolayev, Yu.N. Fost. Scientific Supervisor; Candidate of Technical Sciences Docent I.P. Stepanenko; 2) Working out a device for definition and Recording Amplitude-Phase Characteristics; done by Yu.I. Grashin, V.I. Zaytsev, A.M. Konstantinov. Scientific Supervisor; Candidate of Technical Sciences Docent K.E. Erglis; 3) Theoretic Calculation of a Linear Electron Accelerator on the Energy of 5 mW; done by A.V. Shal'nov, Ye.T. Pyatnov, A.A. Glazkov, S.P. Lomnev. Scientific Supervisor; Candidate of Technical Sciences O.A. Val'dner. The corresponding technical

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SOV/142-58-5-17/23

Research in the "Vuz". Short Information. Moscow Institute for Engineering and Physics

project was worked out by O.S. Milovanov, Yu.V. Mizin, A.V. Shal'nov, D.M. Zorin, V.G. Gass, A.G. Tragov. Scientific Supervisor: Candidate of Technical Sciences O.A. Val'dner; 4) Working out the System for a Figure Controlling Machine; done by A.I. Voitelev, B.I. Kal'nin, Ye.A. Aksenov. Scientific Supervisor: Candidate of Technical Sciences Ya.A. Khetagurov.

SUBMITTED: March 29, 1958

Card 2/2

Fillipov, A.G.

9(1) 21(6) 44 PHASE I BOOK EXPLOITATION 907/1765
"Vozdushnaya mauchno-tekhnicheskoye obshchestvo radiotekhniki i elektroniki"

Pellepovodnikovaya elektronika (Semiconductor Electronics) Moscow, Gosizdat, 1959. 222 p. 13,950 copies printed.

Ed.: V.I. Shashurin; Tech. Ed.: E.P. Voronin.

REMARKS: The book is intended for engineering and technical personnel working with semiconductor devices.

CONTENTS: The book is a collection of lectures delivered at the All-Union Seminar on Semiconductor Electronics in March 1957. The seminar was organized by the Scientific and Technical Society of Radio Engineering and Electronics. The authors of the lectures have attempted to present the most complete information on the operation of semiconductor devices. The articles describe the operation and characteristics of crystal diodes and transistors and discuss their application in various low-frequency, high-frequency and pulse circuits. No personalities are mentioned. References appear at the end of each article.

Card 1/1

6.9. Tsykiz. Transistor Inverter of P-C Voltages
The author discusses the operation and characteristics of inverter circuits using transistors. Special attention is given to the operation and design of inverter circuits with a signal generator. There are no references.

Card 6/7

6.9. Kozlov. Voltage Stabilizers Using Semiconductor Devices
The author discusses voltage stabilizing circuits using all types of crystal diodes and transistors. He also explains equations for series and feedback stabilization and discusses transistor stabilizing circuits with feedback. There are 3 references of which 1 is Soviet and 2 English.

AVAILABLE: Library of Congress

37/40a
5-86-59

Card 1/1

KONONOV, B.N.

О. Е. Попов

Переходный процесс в полупроводниковых диодах при протекании через них в прямом направлении импульсов тока малой длительности.

А. С. Баранов

Предельный метод расчета переходного процесса в полупроводниковых диодах при больших токах.

А. В. Зарин

Исследования работы полупроводниковых диодов в цепи генератора импульсов тока при больших токах сигнала.

В. А. Вар

Определение сопротивления в диффузионном полупроводниковом приборе.

С. А. Гармаш

Полупроводниковые приборы с управляемым сопротивлением в их применении в радиотехнических цепях.

10 минут

(с 10 до 16 часов)

Секретные материалы с целью полупроводниковых диодов.

10

В. И. Голубев

Диффузионный транзистор на полупроводниковых приборах.

А. Ю. Гармаш

В. А. Гармаш.

В. В. Зарин.

Г. В. Катанов.

В. А. Калашников.

Секретные материалы конференции полупроводниковых приборов на полупроводниковых приборах.

А. В. Зарин

Т. В. Агасов.

В. С. Зарин.

В. А. Гармаш.

В. В. Зарин.

А. Г. Зарин.

В. В. Зарин.

Краткие полупроводниковые материалы и радио-технические материалы.

В. И. Зарин

Формы полупроводниковых материалов и транзисторов с целью полупроводниковых диодов.

10

report submitted for the Centennial Meeting of the Scientific Technological Society of Radio Engineering and Electrical Communications in A. S. Popov (VSEI), Moscow, 8-10 June, 1959

КОЛОДОВ, В. В.

В. А. Гринин,
В. В. Колосов,
В. В. Колосов,
А. Г. Колосов,
В. В. Колосов.

Комплексная разработка методов и приемов
радиотехнической защиты.

10 часов
(с 10 до 22 часов)

А. А. Колосов

Методы расчета устройств на ферритовых сердечниках.

В. В. Колосов

Особенности конструкции систем, обеспечивающих
ферритовую защиту в радиотехнических устройствах.

В. В. Колосов

В. В. Колосов

Вспомогательные материалы, связанные с
темой.

А. А. Колосов

О расчете систем на ферритовых сердечниках.

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11 часов
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В. В. Колосов

Системы на ферритовых сердечниках.

В. В. Колосов

Применение ферритовых сердечников в радиотехнических
устройствах с целью защиты от помех и повышения
устойчивости.

В. В. Колосов

Матрицы ферритовых сердечников для защиты
матричных устройств.

В. В. Колосов

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Технический материал, связанный с темой
для радиотехнической защиты на ферритах.

11 часов
(с 10 до 22 часов)

В. В. Колосов

Защитные устройства для радиотехнических
устройств.

10

report submitted for the Confidential Meeting of the Scientific Technological Society of
Radio Engineering and Electrical Communications in A. S. Popov (VSEI), Moscow,
6-18 June, 1959

PHASE I BOOK EXPLOITATION

SOV/4894

Kononov, Boris Nikolayevich

Simmetrichnyye triggery na ploskostnykh poluprovodnikovyykh triodakh
(Symmetrical Triggers With Junction Transistors) Moscow,
Gosenergoizdat, 1960. 159 p. 15,000 copies printed.

Ed.: V. I. Shamshur; Tech. Ed.: N. I. Borunov.

PURPOSE: This book is intended for technical personnel and students
in electronics, computer technique, and automation.

COVERAGE: The book examines the theory and design of symmetrical
triggers equipped with junction transistors. The author de-
velops methods of computing the trigger, taking temperature, load,
and tolerances for components into account. Connections between
the quick operation of the trigger and the parameters of the
transistors are presented. The book may also be used for design-
ing other pulse circuits. The author thanks I. P. Stepanenko,
Candidate of Technical Sciences, the faculty of the Department
of Electronics, Moskovskiy inzhenerno-fizicheskiy institut (Moscow
Physics and Engineering Institute), I. L. Kaganov, Doctor of

Card 1/4

Symmetrical Triggers (Cont.)

SOV/4894

Technical Sciences, Professor, and K. S. Rzhevkin, Candidate of Physics and Mathematics, for their advice. There are 28 references: 11 Soviet, 16 English, and 1 German.

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AGAKHANYAN, S.M.; KONONOV, B.N.; STEPANENKO, I.P.

Concerning the terminology in the field of transistor electronics.
Izv. vys. ucheb. zav.; radiotekh. 4 no.1:110-114 Ja-F '61.
(MIRA 14:4)

1. Kafedra elektroniki Moskovskogo inzhenerno-fizicheskogo
instituta.

(Transistors--Terminology)

S/194/62/000/006/104/232
D288/D308

9,4330

AUTHORS: Kononov, B.N., and Sidorov, A.S.

TITLE: Tunnel diodes and their application as triggers

PERIODICAL: Referativnyy zhurnal. Avtomatika i radioelektronika, no. 6, 1962, abstract 6-4-64 i (V sb. Poluprovodnik. pribory i ikh primeneniye. no. 7, M., Sov. radio, 1961, 341-357)

TEXT: Static volt-amp characteristics of germanium tunnel diodes (TD) are considered. A circuit is shown for taking these characteristics. Parameters of 15 experimental TD were measured. The results of these are tabulated. The relationship between current ratio I_{\max}/I_{\min} and voltage V_{\min} corresponding to I_{\min} is pointed out. I_{\max}/I_{\min} increasing with V_{\min} . The temperature dependence of the characteristic is checked. With rising temperature the maximum of the volt-amp characteristic is displaced downwards, and the minimum upwards and to the left. Transient response of a single TD trigger is calculated analytically. The volt-amp characteristic of the TD
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Tunnel diodes and their application ... S/194/62/000/006/104/232
D288/D308

is approximated by sections of power functions. Calculations yield approx. durations of the positive and negative drop front: $t_f^+ = 2\gamma_0 C$, $t_f^- = 20\rho_0 C$, where $\rho_0 = (V_{\min} - V_{\max})/(I_{\max} - I_{\min})$. The differential capacitance of the TD is measured near the minimum of the volt-amp characteristic of the TD. A circuit is given for the measurement of this capacitance. In the analysis of transient processes the TD capacitance was assumed as constant and equal to the diff. capacitance at the minimum of the volt-amp characteristic of the TD. 4 references. [Abstracter's note: Complete translation.]

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S/142/63/006/001/003/015
E192/E382

AUTHORS: Kononov, B.N. and Orlikovskiy, A.A.

TITLE: Use of tunnel diodes in high-speed information-storage devices

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Radiotekhnika, v. 6, no. 1, 1963, 33 - 44

TEXT: A storage cell with a tunnel diode operating on the principle of current control is shown in Fig. 1a and its operating conditions are represented in Fig. 1b. The system has two stable states, A and B. The load consists of two resistances, R_x and R_y , each carrying half the current. Such a cell can be used in an x-y matrix. The simplest system of matrix-type storage is a "three-dimensional" storage where the diode is provided with three resistances. Two of these determine the coordinate currents in the planes x-y, while the third defines the order-plane current. The processing of the information is effected by coordinate currents, while the order-plane current is used only for recording "zero". Storage cells of this type are subject to interference from neighbouring cells and it is generally necessary
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S/142/63/006/001/003/015
E192/E382

Use of tunnel diodes

to protect them by limiting diodes having a reverse conduction threshold of the order of 100 mV. Another system of storage is available - the so-called "Z-type", where selection of the position for writing in the code is effected by a single control current I_z , which is applied to selected cells. The recording and regeneration of information is carried out by applying the current of a given order plane directly to the storage cells. The principle of designing tunnel-diode storage cells in such a way that the information is not erased during read-out is based on a diode with two regions of differing slopes. The first extends from the minimum voltage of about 250 - 300 mV to about 440 mV and the second from 440 - 460 mV. Two practically identical segments on the current axis correspond to these substantially different voltage segments. Because of this, the operating point E can be chosen in such a way that during the reading, the interference from a semi-excited cell is much smaller than the pulse reading "1". The operating speed of the storage cells based on the diode operating in the Z-system is evaluated. Their operating speeds are roughly equal to those of x-y systems. It is shown that the recording

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E192/E382

Use of tunnel diodes

time is equal to $(2.68 \text{ to } 5.28) \rho_0 C$, where ρ_0 is the absolute value of the mean negative resistance of the diode and C is its capacitance. The reading times vary between $2.4 \rho_0 C$ and $12.2 \rho_0 C$.

Thus, for Soviet-made diodes of n-Ge with a maximum current of 5 mA and time constants $\rho C = 10$ mps, the total writing and reading time is approximately 100 mps. The total time is roughly 3 mps for diodes made of gallium arsenide. The diodes were also investigated experimentally. There are 7 figures and 4 tables.

ASSOCIATION:

Kafedra elektroniki Moskovskogo inzhenerno-fizicheskogo instituta (Department of Electronics of Moscow Engineering Physics Institute)

SUBMITTED:

August 14, 1962

Card 3/4

L 18730-63
ACCESSION NR: AP3004892

BDS

S/0120/63/000/004/0067/0072

AUTHOR: Kononov, B. N.; Churin, Yu. A.

47

TITLE: Shaping devices using tunnel diodes

SOURCE: Pribery* 1 tekhnika eksperimenta, no. 4, 1963, 67-72

TOPIC TAGS: tunnel-diode shaping device, shaping device, inductance shaper, cable-section shaper, shaper, tunnel diode

ABSTRACT: Pulse-shaping devices — inductance shapers and shapers utilizing cable sections — using tunnel diodes driven by scintillation radiation detectors are discussed. The circuit of the inductance shaper is shown in Fig. 1a of Enclosure. The initial operating point in the vicinity of the maximum volt-ampere diode characteristic (Fig. 1b) is fixed by resistor R_1 and insures the high sensitivity of the shaper. Low resistance R_4 , which determines the diode static load line and ensures a regime with one stable state, is selected on the basis of $R_4 > \rho_{\min}$, where ρ_{\min} is the minimum absolute value of negative resistance. The signal voltage is applied to the shaper through resistor R_3 ; higher resistance sources, like photomultipliers, can be connected directly to the circuit. At the appearance of a steep front input signal, the inductance current varies only

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slightly, and the major part of the control current is fed to the diode capacitance, causing a rapid switching of the current to point B (see Fig. 1b). The next pulse through resistor R_1 and the nonlinear resistance of the diode returns the circuit to the initial state. The duration of output pulse peak is determined mainly by the variation time of the inductance current and depends only slightly on input signal amplitude. Shaper sensitivity may amount to fractions of a milli-ampere and may be limited by temperature dependence of the maximum volt-ampere characteristic current (I_1) of the diode. The experimental circuits used n-type Ge diodes operated stably within the temperature range of 0 to +60C with a sensitivity of $0.2I_1$ at 20C. The circuit shown in Fig. 1a forms pulses with an amplitude of about 300 mv and a duration of 60 nsec. However, this type of circuit has an insufficient input-signal amplitude range, does not ensure satisfactory signal-duration uniformity, and makes it difficult to form short pulses. These shortcomings can be eliminated by operating the circuit as a multivibrator, i.e., by triggering it with long high-amplitude signals. Better results are obtained with pulse-forming circuits using cable sections. A schematic diagram of such a shaper is shown in Fig. 2. The circuit determining its operating conditions is similar to that of the inductance shaper. Resistor R_1 prevents short-circuiting of the cable, and the voltage gradient occurring in the diode after

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the appearance of the input pulse spreads along the cable. The voltage wave of opposite polarity reflected from the short-circuited end of the cable returns the diode to the initial state. When the inductance is low the sensitivity of the circuit in respect to the wave reflected from the cable end increases, thereby expanding the range of input pulse amplitude. Experiments have demonstrated that shapers using Ge diodes with an I_1 below 4 to 5 mamp and a cable characteristic impedance of 75 to 100 ohm operate satisfactorily in a range of input pulse amplitudes varying by a factor of 10. The operation was checked during the triggering of the device by the pulses of a scintillation detector using Co^{60} as a source. At a range of photomultiplier-pulse amplitudes varying by a factor of over 10, the amplitude spread of formed pulses did not exceed 15%, while the spread of response delays was 3 to 5 nsec. Orig. art. has: 10 figures. a.

ASSOCIATION: none

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DATE ACQ: 28Aug63

ENCL: 02

SUB CODE: SD

NO REF SOV: 005

OTHER: 001

Card 3/5

KONONOV, B.N.; SIDOROV, A.S.; LEONOV, V.F.

Current discriminators on tunnel diodes. Prib. i tekhn. eksp.
8 no.5:103-106 S-O '63. (MIRA 16:12)

GORN, L.S.; KONONOV, B.N.; KUZNETSOV, K.F.

[Nuclear instrument manufacture] IAdernoe priborostroenie;
nauchno-tekhnicheskii sbornik. Moskva, Atomizdat, 1964.
(MIRA 18:10)